Facilities Development Manual

Wisconsin Department of Transportation

Transmittal No. 386

Date: March 5, 2012

Subject: Revisions to Chapters 3, 7, 8, 11, 16, and 19

Where new text has been inserted or combined with old text, the new text appears shaded.

FDM 3-5 and FDM 3-5 Attachment 6.1

FDM 3-5 was edited and FDM 3-5-6 was added defining the policy for local program bridge approach lengths eligible for Federal funding. FDM 3-5, Attachment 6.1 further defines the policy background and the process and documentation required for various approach lengths (short, medium, and long) on local program bridge approaches.

FDM 3-15

FDM 3-15-25 has been updated to reflect the need for designers to document the approach lengths for local bridge approaches in the design study report (DSR).

FDM 7-20 and FDM 7-20 Attachment 5.1

FDM 7-20 regarding purchased access control (control by Section 84.09) was updated along with the example DT2051 (attachment 5.1 - Notice of Non-Access Highways).

FDM 7-25 and FDM 7-25 Attachment 1.1

FDM 7-25 regarding State trunk highway (formerly driveway) access control has been updated along with the example sample denial letter (attachment 1.1 - sample denial letter).

FDM 7-40 Attachment 1.2

Since form DT2051 - Notice of Nonaccess Highway (DT2051) has been updated the example document provided as attachment 1.2 was updated.

FDM 8-5-30

FDM 8-5-30.10 relating to consultant services master contract group approval contacts has been updated.

FDM 11-35-1

Added section 1.7 to FDM 11-35 (structures) to refer designers to FDM 3-5-6 for information regarding determining local program bridge approach lengths eligible for federal funding.

FDM 11-45-2 and FDM 11-45 Attachment 2.1, 2.2, 2.3 and 2.4

FDM 11-45-2 relating to roadside barrier design length of need has been updated. Specifically, the implementation dates and the runout lengths for barrier design (table 2.1). Attachments 2.1 through 2.4 reflect updates to the example problems due to the updated runout lengths.

FDM 16-5-1 Exhibit 1.1

The List of Standard Detail Drawings (Exhibit 1.1) has been updated.

FDM 19-7

Edited the value used to estimate asphaltic material from 6% to 5.5%.

FDM 19-40 Exhibit 1.2

Updates to the standard detail drawings examiner's list.

Chapter 16 Standard Detail Drawings

Implementation Schedule: These drawings will be included when applicable in plans scheduled for the May, 2012 PS&E due date Project Letting Process.

SDD 12A04-02 Structure Identification Plaques, Ramp Gates, Sign Bridges, and Overhead Sign Support (revised)

With the ramp gates that are being installed on WisDOT roadways, there is a need to number and inventory them. The revisions to this SDD account for the design of ramp gate number plaques, which are similar to sign bridges and overhead sign supports, except they have a “G” designation.

The Steel Thrie Beam Structure Approach series (SDD 14B20-10) have been updated as folllows;

SDD 14B20-10a, Steel Thrie Beam Structure Approach (revised)

SDD 14B20-10b, Steel Thrie Beam Structure Approach, Connection to Square End Parapets (revised)

SDD 14B20-10c, Steel Thrie Beam Structure Approach, Connection to Vertical Faced Parapets (revised)

SDD 14B20-10d, Steel Thrie Beam Structure Approach, Connection to Sloped End Parapets (revised)

SDD 14B20-10e, Steel Thrie Beam Structure Approach, Connection to Bridge Railing Types “F” and “W” (revised)

SDD 14B20-10f, Steel Thrie Beam Structure Approach, Connection to Bridge Railing Type “M” (revised)

SDD 14B20-10g, Steel Thrie Beam Structure Approach, Connector Plate Detail (revised)

SDD 14B20-10h, Steel Thrie Beam Structure Approach, Single Slope Attachment (revised)

The former sheet "b" titled connection to square end and vertical faced parapets has been broken into sheets "b" connection to square end parapets and sheet "c" connection to vertical faced parapets. In addition, refer to revisions to SDD 14B45 series below.

SDD 14B28-02, Guardrail Mow Strip (revised)

This Standard Detail Drawing now includes an alternate HMA mow strip design.

The Midwest Guardrail System (MGS) Thrie Beam Transition series (SDD 14B45-2) have been updated as folllows;

SDD 14B45-2a, MGS Thrie Beam Transition: Layout (revised)

SDD 14B45-2b, MGS Thrie Beam Transition: Cross Sections, Thrie Beam Details, Splice Detail (revised)

SDD 14B45-2c, MGS Thrie Beam Transition: Thrie Beam Details, Post Details, Block Details (revised)

SDD 14B45-2d, MGS Thrie Beam Transition: Attachment to Square End Parapets (revised)

SDD 14B45-2e, MGS Thrie Beam Transition: Attachment to Vertical Faced Parapets (revised)

SDD 14B45-2f, MGS Thrie Beam Transition: Attachment to Slope Concrete Parapets (revised)

SDD 14B45-2g, MGS Thrie Beam Transition: Connection to W and F Bridge Parapets (revised)

SDD 14B45-2h, MGS Thrie Beam Transition: Connection to M Bridge Parapet (revised)

SDD 14B45-2i, MGS Thrie Beam Transition: Single Slope Connection Plate Details (revised)

SDD 14B45-2j, MGS Thrie Beam Transition: Connection to Single Slope Barrier (revised)

Sheet “a” : Note referred to wrong SDD when encountering rock. Old drawing referred to Class A beam guard drawing. Change will refer to MGS drawing.

Sheet “b” : Added plate washer detail.

The former sheet "d" titled attachment to concrete bridge parapets and concrete barrier has been broken into sheets "d" attachment to square end parapets and sheet "e" attachment to vertical faced parapets.

Sheets “d”, “e”, “f”, “g”, and “j” : Backup plate removed and replaced by plate washer. Length of bolt that connects thrie beam to rigid barrier removed and replaced with language requiring contractor to field verify bolt length and only use one washer to install bolt. Allow contractor option of A325 or A449 bolts. Provide details showing bolting to rigid barriers. Provide top of rail tolerances and added note about not needing a bolt in certain connections.

SDD 15C9-9a, Signing and Pavement Marking Details for Railroad-Highway Grade Crossing (revised)

SDD 15C9-9b, Truck Stopping Lane Pavement Marking (revised)

These Standard Detail Drawing series have been revised to provide a minimum and maximum distance range for the placement of railroad markings and the W10-1 sign. This range can be found in the table on sheet “a” of this series.

SDD 15C29-2a, Bicycle Lane Marking (revised)

SDD 15C29-2b, Bicycle Lane Marking (revised)

SDD 15C29-2c, Urban Bicycle Lane Marking (revised)

SDD 15C29-2d, Urban Bicycle Lane Marking (revised)

SDD 15C29-2e, Pavement Marking for Bike Lanes (revised)

SDD 15C29-2f, Pavement Marking for Shared Lane (revised)

Sheet “a” : Removed Bike Accommodations on Shoulder detail. If this type of detail is recommended it will be called for in the plans. Revised channelizing lines to 8”. Added General Note No. 7 to dotted line while removing the 4” arrow line from Note No. 1.

Sheet “b”: Changed right handed line to 8”. Added General Note No. 7 to dotted line while removing the 4” arrow line from Note No. 1.

Sheet “c”: Changed edge line to 4”. Eliminate 8” channelizing line arrow to edge line.

Sheet “f”: Added General Note No. 3 to dimension to edge of pavement. Added minimum to both

dimensions. Shared Lane Detail dimension correction.

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